6JD6

Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE
FRAME-GRID CONSTRUCTION

For Use as High-Gain Intermediate-Frequency-Amplifier Tube in Television Receivers. No External Shield Required. Cutoff Characteristic Approaching Semiremote.

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:		
Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	0.300	amp
Peak heater-cathode voltage:		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200[a] max.	volts
Direct Interelectrode Capacitances:[b]		
Grid No.1 to plate	0.019 max.	pf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater	8.2	pf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater	3.0	pf

Characteristics, Class A_1 Amplifier:

Plate Supply Voltage	125	volts
Grid-No.3 Voltage	0	volts
Grid-No.2 Supply Voltage	125	volts
Grid-No.1 Supply Voltage	0	volts
Cathode Resistor	56	ohms
Plate Resistance (Approx.)	160000	ohms
Transconductance	14000	μmhos
Plate Current	15	ma
Grid-No.2 Current	4	ma
Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 600	-4.5	volts

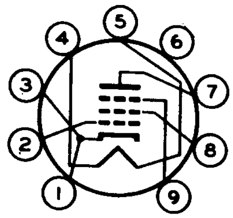
Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See *General Section*
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No.E9-1)

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Basing Designation for BOTTOM VIEW. 9PM

Pin 1 -Cathode
Pin 2 -Grid No.1
Pin 3 -Cathode
Pin 4 -Heater
Pin 5 -Heater
Pin 6 -No Internal Connection



Pin 7 -Plate
Pin 8 -Grid No.2
Pin 9 -Grid No.3 Internal Shield

AMPLIFIER — Class A_1

Maximum Ratings, *Design-Maximum Values:*

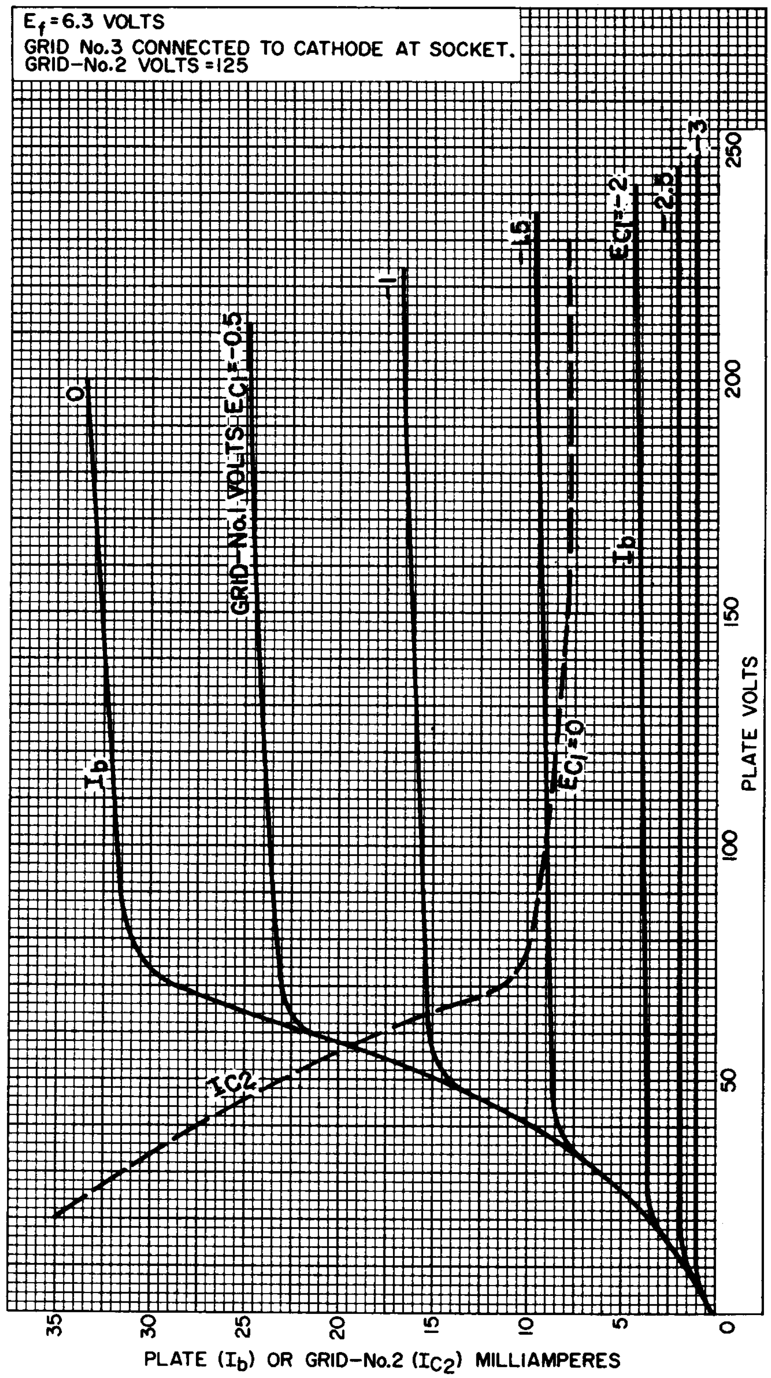
PLATE VOLTAGE	330 max.	volts
GRID-NO.3 (SUPPRESSOR-GRID) VOLTAGE:		
Positive value.	0 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE. . .	330 max.	volts
GRID-NO.2 VOLTAGE . . . . . . See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section		
GRID-NO.1 (CONTROL-GRID) VOLTAGE:		
Positive-bias value	0 max.	volts
GRID-NO.2 INPUT:		
For grid-No.2 voltages up to 165 volts	0.6 max.	watt
For grid-No.2 voltages between 165 and 330 volts . See *Grid-No.2 Input Rating Chart* at front of Receiving Tube Section		
PLATE DISSIPATION	2.5 max.	watts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:		
For fixed-bias operation.	0.25 max.	megohm
For cathode-bias operation.	1 max.	megohm

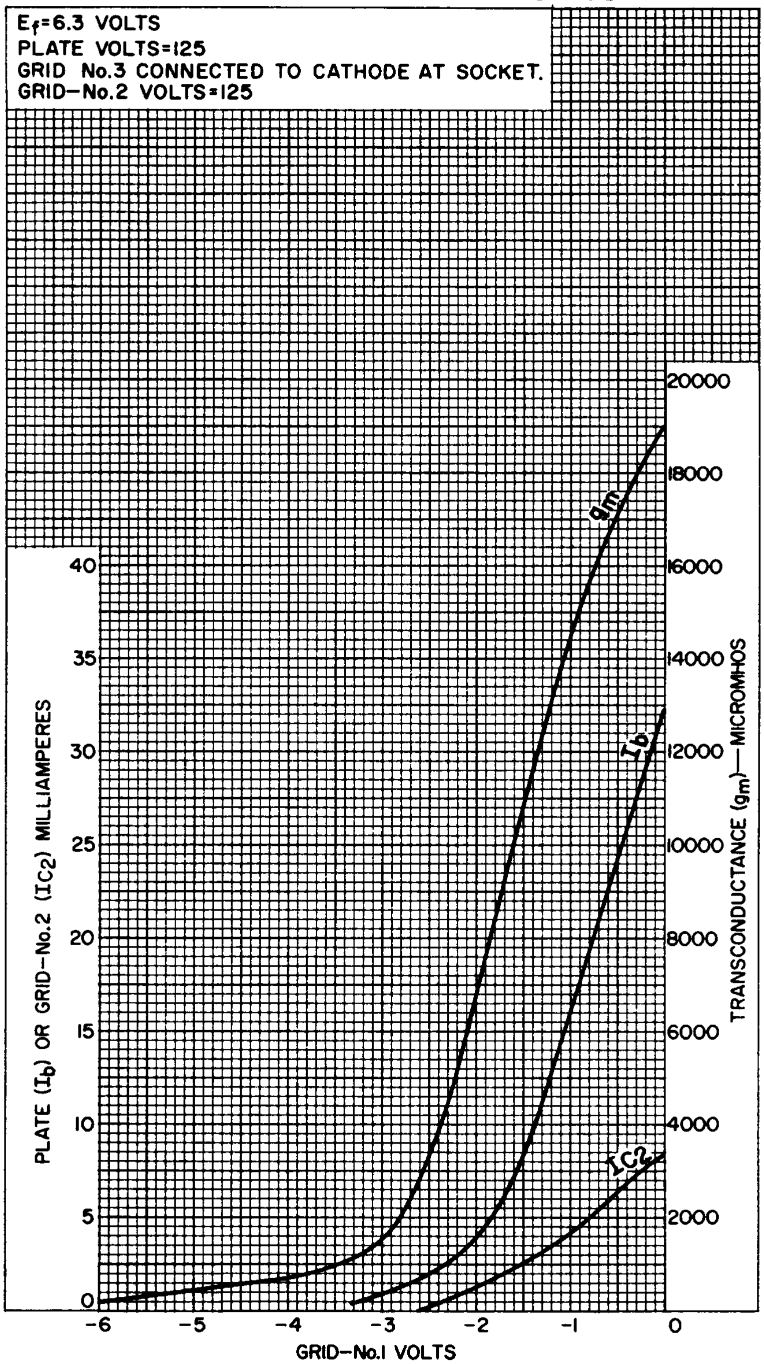
[a] The dc component must not exceed 100 volts.
[b] Without external shield.

AVERAGE CHARACTERISTICS



92CM-11951

AVERAGE CHARACTERISTICS



92CM-11952RI